

METHODS AND APPARATUS FOR CONTROLLING A DATA STREAM USING  
A HOST AGENT ACTING ON BEHALF OF A HOST COMPUTER

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ABSTRACT OF THE DISCLOSURE

Techniques are provided for controlling a data stream without communicating with the host. In one arrangement, a host agent runs in a computerized data processing device and receives a request signal from a request signal source (e.g., a router seeking direction on how to handle a data stream). The request signal requests, from a host  
10 computer that is different than the computerized data processing device, control information for controlling a manner in which the request signal source transfers the data stream. In response to the request signal, the host agent generates a control signal which includes the control information for controlling the manner in which the request signal source transfers the data stream. The host agent provides the control signal to the  
15 request signal source to individually control the manner in which the request signal source transfers the data stream among multiple data streams transferred by the request signal source. Since the host computer is not needed to provide the control information, resources of the host computer are left available for other operations and bandwidth between the host computer and the request signal source is conserved. In one  
20 arrangement, the host agent acts on behalf of a sending host or an originator of the data stream. In another arrangement, the host agent acts on behalf of a receiving host or an intended recipient of the data stream. Preferably, computerized data processing device and the request signal source reside together, e.g., form at least part of the same data communications device. In such an arrangement, the request and control signals do not  
25 to pass through the network. Rather, they can be contained within a single cabinet, e.g., as multiple processes which use non-network techniques such as Interprocess Communications (IPC) mechanisms to exchange request and control signals.